



# of New England Michomonnless



The MMNE was organized on November 5, 1966 for the purpose of promoting the study of minerals that require a microscope.

## PRESIDENT

Frank Leighton Templeton Rd. 1 Phillipston, MA 01331

## VICE-PRESIDENT

Neil Briggs RFD #1, Box 94 Brattleboro, VT 05301

## SECRETARY

Betty Sevrens 94 Pearl Street Woburn, MA 01801

# TREASURER

Janet Cares 18 Singletary Lane Sudbury, MA 01776

## EDITOR

Shelley N. Monaghan 12 Conant Drive Brockton, MA 02401

Dues are \$ 4.00per year and are due on January 1st, payable to the Treasurer.

Contributions of news items for the Bulletin are welcome and should be sent to the Editor.

This bulletin may be quoted if credit is given. --- Club Address is c/o Editor.

# → NEXT MONTH

Next month the MMNE will be holding their Northeast Meeting in Ashland, Mass., at the 4-H Conference Center, May 2, 1987.

**APRIL 1987** 

NEWSLETTER # 115

The next regular meeting of the Micromounters of New England will take place on Saturday, April 4, 1987 at the Hudson Public Library in Hudson, Mass. This meeting occurs on the same weekend as the Connecticut Valley Mineral Club's Show which is being held at Holyoke Community College. As the show is open on Saturday until 6 P.M., you might consider stopping by after our regular meeting. I am told that there will be an area for micromounting at the show.

## IMPORTANT REMINDER!!!

Don't forget to get your registration form for our May meeting to Violet Robinson, as the deadline is the 17th of April.

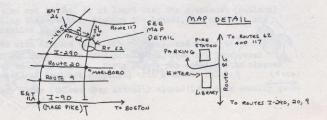
ALSO: We need contributions for the sales table as well as give-aways. Bring them to the next meeting if possible. (Sales items should be pre-priced, and give-aways should be mounted or placed in a container, labelled, and include the donor's name.)

## WELCOME NEW MEMBER:

Christopher E. Corrigon 71 Joseph Road Framingham, Mass 01701 (617) 877-1433

(for additions to last month's membership list, see page 2.)

The nominating committee will present their slate of officers for 1987-1988 at the April meeting. A vote on that slate will take place during the business meeting. The proposed slate is as follows: Neil Briggs, President; Bob Clements Vice-President; Janet Cares, Treasurer; Secretary -- TBA; and as the club Constitution originally required a Corresponding Secretary as a fifth board member, Shelley Monaghan has been nominated as Corresponding Secretary/Editor.



#### PLEASE ADD THE FOLLOWING NAMES TO THE MEMBERSHIP LIST:

Ed Piela 17 LeClair Terrace Chicopee, MA 01013 (413) 592-6718

Michael W. Swanson, M.D. 46 Meadow Lane (new address) Greenfield, MA 01301 (413) 774-5066

Palmer & Betty Sevrens 94 Pearl Street Woburn, MA 01801 (617) 933-1127

Virginia & William Gregory Four Longfellow Place, #1810 Boston, MA 02114

John Anderson 17 Ginley Road Walpole, MA 02081 (617) 668-2008

CHANGE: Larry M. Cross 64 Hamilton Drive Manchester, CT 06040 (same phone)

CORRECTION: Emile Rappa's phone # (413) 594-4847

Notes on the September 86 Field Trip to Mont St. Hilaire--from the CMMA "MICRONEWS". 3/87

For those members who were present, some additional information on species identification may be useful. For those not present, you can read this with envy. The material from the hornfels on the middle level of Poudrette Quarry yielded

the following minerals from numerous tight seams:

siderite calcite strontianite

pyrite marcasite quartz

gmelinite rutile anatase

chlorite apatite

unknown black plates

The material is attractive and somewhat reminiscent of Francon. Most of the seams are lined with beautifully developed siderite (it does not effervesce rapidly enough to be calcite) in good rhombic forms. On these are numerous splendant pyrite crystals, mostly in cube form and some attractive quartz. I have one excellent scepter quartz from this find. The remaining minerals are sparsely represented but exceedingly well formed.

Most of those on the trip have some samples with furry white balls on them. I had several pieces x-rayed by Cynthia Peat at the ROM and all proved to be strontianite. Sketch 4308 shows the usual white fur balls but sketches 4494 and 4318 also represent forms of strontianite that were found sparingly on this trip.

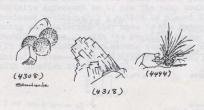
Small but attractive rutile were found as well as a few dark blue/black platy

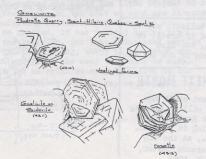
anatase and some very well formed prismatic apatite.

Gmelinite samples were the other good find of the day. They occurred in a fair range of habits though all tended to be flat plates with pinacoid predominant, as in sketches 4310 and 4311. Some of these were perfectly clear and transparent, others were opaque and grey or clear with a grey core due to inclusions. A few showed some pyramidal modification but these occurred mostly in compound rosettes as shown in sketch 4313.

At present the hornfels is quite abundant in the quarry and as long as this is the case good opportunity will persist to find more of these fine samples. See you there

next year. .... Garry Glenn





# CHOOSING AND CARE OF A MICROSCOPE by Dana M. Morong

Obviously, for looking at tiny crystal specimens, a micromounter will want a wide-field binocular microscope. Probably the best way to get one is to order a second-hand one from a reputable firm dealing in them. The powers should be in the 10X to 30X (or up to 50X) range; you can see much more through a 10X on a binocular scope than with a 10% magnifier. This is partly due because microscope makers generally term power by lineal proportion (in which something imm is magnified to 10mm), and magnifiers termed 10% are in terms of areal proportion, so that the 10% magnifier actually only magnifies the square root of 10, or a little over 3 (try it for yourself). You will want to avoid "pencil microscopes," as some are junk and others, highly priced, are generally only useful in the field, where there is strong sunlight, necessary to see much of anything.

Another way to get one is to buy a new one, but make sure it is of good quality! Nothing is a bargain if it doesn't work, once said Mr. Yedlin. Perhaps you can view through other people's microscopes (with permission) noting model, make, and quality, to see which type you'd order. However, as some people's optics may be dirty, you have to use discretion in the judging of various kinds.

A less expensive alternate, though not a usual opportunity, is to buy an old one offered by a college updating their equipment. In this case you must bring along some micromount specimens and your own light and do your own testing prior to buying. View some specimens awhile. If your eyes don't get tired after 10 minutes of viewing, it can't be too bad! (Of course you must first adjust interpupilary distances, and the diopter differences of eyes on the eyepieces.) Focusing should be smooth, with little or no free play and no "let-down". Lenses shouldn't be scratched much, there shold be no blurring on edges of vision, and they should have good resolution (ability to see fine detail). The frame and base should be solid, well-made, and heavy (so that it will not be easily tipped over). It should be easy to change powers (preferably on the objectives, as changing oculars can let dust into the tubes), and it shouldn't waggle about when powers are changed (however, some waggles on rotatable turrets are only due to a loose spring clip, which can be tightened, with objective carefully removed, by a slight bending with the fingers; and then replacing the objective). Eyepieces should preferably be covered, but if stored in a cabinet, dust can be brushed off with a tiny paint-brush. In short, if it has good and clean optics, works well, then buy it.

The care of your microscope is very important, as you want it to last. Also, should you ever sell it, a good scope, though used, is of value, whereas a neglected or filthy scope has little value. You should take good care of it if a few simple things are remembered and heeded:

At home, have a clean and safe place where your scope can be set up, and when moving it, handle it gently but firmly, picking it up by its base and framework, to put it into its box. If it didn't come with a box, you can make one from a sturdy old suitcase, padded with something like styrofoam (you can glue, then paint styrofoam, to eliminate "snow") so that it holds it firmly by the base and framework.

Keep it covered when not in use, or at least keep the eyepieces (oculars) covered, but not with anything that actually touches the lenses, and not with any cover either dirty nor attractive to dust.

Don't touch lenses with fingers (gets oil on them), and don't use a rag to clean the lenses. Brush off dust with a tiny paintbrush, then use lens paper (which is quite inexpensive) to clean lenses. Dirty lenses can sometimes be cleaned with a bit of lens paper moistened (but not mopping!) with a bit of xylol.

Don't lubricate any parts (unless they actually squeak!) as this usually gunks it up!

(MICROSCOPE, CONT.)

Most importantly, don't let anyone smoke anywhere near your scope. Whereas common bedroom dust only falls from above, smoke is statically charged when produced and sticks to all surfaces, upside-down or not. It is sticky and dirty and can be corrosive (in years it can harm the surfaces of softer minerals), and in general is pretty bad for the optics. Also, if you have a wood stove, keep your scope generally out of the stove room.

The author has seen some nice clean scopes, but also some awfully dirty optics in scopes (no wonder one collector said, "I can't see the crystal." Looking through his scope, I'm not surprised). Perhaps, after all these years, it needs a good cleaning.

Some recommend that scopes be serviced (cleaned and adjusted) every 5 years (maybe 10 for those of us who are careful with them) by someone who actually knows what he is doing (not you nor I, but a professional). But don't get a guy who either thinks he knows how, nor one who looks down on scopes costing less than a thousand and thinks they are hardly worth his while. Be prepared to pay (good service is rarely cheap), but remember that high prices don't always mean quality service, so get some references first, and take a good look through some scopes recently serviced to see if they are still in adjustment. If good, get yours done also. You'll be glad you did, and you may discover something new on a specimen that you had previously missed. Anyhow, a clean microscope is enjoyable to use.

One last comment and warning: When you get together with other micromounters, don't move fast, and watch your feet, as there are often cords running to lights, and tripping can pull things which can lead to bad accidents. It is highly advisable to bring extra extension cords (to plug your lights into) so as to have plenty, run them somewhere they won't get tripped on, even taping them down where people walk. Cords should never be spanning inter-table distances like suspension bridges (indeed the very thought causes suspense!). Tables should be sturdy and easy to sit down at. Above all, don't hurry, and watch where you move your chair; others may not be as careful as you are with their cords! 

TO THOSE MEMBERS INTERESTED IN SWAPPING MICRO MATERIAL:

It was brought up during the March business meeting that a micromount society located in Africa was interested in arranging a swap of material. The society has done numerous swaps with other clubs and it is very specific as to how the swap is to be made. In essense, a member of our club puts together a package of ten micros, all of the same specie. The micros should not be mounted. Then, assuming our club can furnish at least ten people willing to donate ten specimens each, the material is sent to the other micromount society. That society in turn sends out a package of micros, and each person of our club who contributed gets an equal number in swap, but each micro will be a different specie. Therefore one sends ten alike micros and receives ten different ones in trade. (The groups of ten that we send are likewise packaged and doled out to their club's participating members.) As there was no definite agreement as to how the swap would be handled, it was decided during the business meeting that a notice be placed in the bulletin, and that interested parties bring what material they have to the Hudson (April) meeting, there to be sorted out. Should we come up with the required number of specimens the swap will then be made. (It was mentioned as a strong suggestion that the material we send be native to the United States -- no St. Hilaire or Francon, as the African Society may be swapping with Canadian clubs as well.